

The Sea Train: Connecting Families to Alaska's Unique Educational Resources

1. Project Design

The Sea Train is a partnership between the Alaska SeaLife Center, a marine research facility and public aquarium in Seward, Alaska; the Anchorage School District, which serves roughly half the state's population; and the Alaska Railroad Corporation, which connects Anchorage and Seward with 125 miles of historic and scenic railroad tracks. The Sea Train program was designed to provide a science-based field learning experience for Anchorage students using Alaska Railroad cars as unique mobile classrooms.

The Sea Train goes far beyond a traditional field trip by combining energy-related lessons with teacher training, assessment tools, and printed materials that have been approved as part of the fifth grade curriculum. Approximately 3,500 students, 700 parent chaperones, and 160 teachers each year will be transported beyond their schools, neighborhoods, and usual frames of reference as they explore and investigate concepts tied to Alaska state geography and science standards. The journey between Anchorage and Seward is used as the platform for a day of science learning. Teacher and chaperone guides are designed so adults can encourage students to complete questions and record observations in student activity journals during their time on the train and at the Alaska SeaLife Center, where they visit learning stations throughout the exhibit area. The program features an eight and a half hour day of interdisciplinary activities designed to supplement the Anchorage School District's fifth grade science curriculum. Pre- and post-visit classroom lessons reinforce the day's concepts and experiences.

The Sea Train program was founded in memory of Carol Treadwell, an Anchorage mother and advocate of science and geography education who died of a brain tumor in 2002. The program's concept and curriculum were developed by the Alaska SeaLife Center and Anchorage School District in 2004 and tested with a pilot program on May 5, 2005, allowing educators to evaluate the Sea Train with nearly 400 students and 100 teachers and chaperones from six elementary schools. The overwhelming success of the one-day pilot—measured informally by teacher and student interviews—justified expansion of the program to include every fifth grader in the Anchorage School District.

In October 2006, nine different train days involved nearly 4,400 participants from 62 different elementary schools. Completing the full program proved an invaluable learning experience because many of the challenges inherent in such a large scale and ambitious partnership come sharply into focus during implementation. An informal survey of participants will help evaluate the 2006 program, and a professional evaluation will be conducted in 2007-8 to assess whether the Sea Train enables the Alaska SeaLife Center to serve the Anchorage community more effectively.

The Sea Train program will help each partner achieve separate but complementary goals:

- The Anchorage School District will “establish an effective learning environment by collaborating with other community agencies to maximize opportunities for lifelong learning,” one of the School Board Ongoing Overall Goals for 2005-6. The Anchorage School District also can meet new science requirements by using student journals to assess learning;

- The Alaska Railroad Corporation will promote its passenger services and achieve community service goals by deeply discounting charter rates for the program;
- The Alaska SeaLife Center will build connections with Alaska's largest population base as it meets strategic objectives, especially in awareness-building and science outreach.

[Attachments include brief descriptions of the Anchorage School District and the Alaska Railroad Corporation.]

2. Grant Program Goals

The Sea Train program represents the most far-reaching and ambitious effort the Alaska SeaLife Center has ever undertaken to strengthen its ability to serve the public. It is the only aquarium in the state of Alaska designed to house marine mammals and seabirds in 20-foot-deep, naturalistic habitat tanks where visitors can observe diving and feeding behavior. In a state surrounded by a marine environment too cold for most residents to explore, the Alaska SeaLife Center provides access to a diverse group of fascinating marine species. Marine resources are critical to the state's culture, history and economy, yet most Alaskans have little direct experience with cold-water ecosystems.

With the vast majority of Alaska's population living two hours from the Alaska SeaLife Center, attracting a diverse audience to the facility presents a challenge. The all-inclusive structure of Sea Train programs ensures that the Alaska SeaLife Center engages a target demographic: families and children who can learn to appreciate the marine ecosystem, better understand issues affecting Alaska's oceans, and become more scientifically literate while also having a positive experience. While some donors may support the Center without ever visiting, there is no substitute for a direct personal experience to forge connections and spark the imaginations of children.

The Sea Train is a flagship program to connect with a broad base of Alaskan families, businesses and agencies. Because the program has a full year trial completed, planning for 2007 will include mid-term corrections based on each partner's experiences in 2006. Between now and August 2007, the program and partnership will be reviewed and reworked to clarify partner expectations and the tasks assigned to each organization, and to look for ways to make it run more smoothly and efficiently.

3. How the Project Fits into Strategic Plan and Mission

The Sea Train program correlates most directly with the Alaska SeaLife Center's public education mission, but the strategic plan summary makes it clear that the program addresses centerwide development objectives as well as those for education and visitor services. Teachers, students and the general public represent key stakeholder groups for the Alaska SeaLife Center, and broadening the base of funding support will be critical to the organization's growth and sustainability for all departments. Increasing awareness and visibility of the Alaska SeaLife Center as a community resource will benefit the organization and the community in many ways as it builds a base of support to increase unrestricted donations.

The Sea Train program will meet strategic objectives for education through the innovative partnership with the Anchorage School District and Alaska Railroad Corporation, development of standards-based curriculum, providing a unique suite of outreach and on-site programs, and creation of supplemental classroom materials the Alaska SeaLife Center can share with other districts and schools in conjunction with distance learning efforts. Visitor services objectives are met by the increased public visibility and reputation that the program brings. Coupons distributed to each Sea Train student will help determine whether the program results in more families visiting the center, an expected outcome. [A sample coupon is attached.]

The Sea Train curriculum helps communicate the methods and goals of SeaLife Center research by describing how Steller sea lions, seabirds, and other wildlife use food energy to grow and keep warm. Activities are tied to Alaska SeaLife Center research projects that investigate marine mammal physiology and metabolism to determine the food levels and diet composition animals need to survive. In addition, SeaLife Center researchers lead Sea Train activity stations on careers and marine mammal adaptations, and students observe wild Steller sea lions by remote cameras transmitting live video signal from an island 35 miles away.

The Sea Train project represents an investment in long term support and sustainability for the Alaska SeaLife Center by creating new opportunities for fundraising, allowing the Center to better reach its mission goals of research, rehabilitation, conservation and public education. The efforts required to identify interested donors and solicit corporate support will help staff, leadership, and the Board of Directors to build relationships with Alaskans who support the Alaska SeaLife Center mission and strategic objectives. Over the next several years, the goal is to transition Sea Train funding so that individual donations become at least as significant as corporate and foundation support. Even if the program cannot be sustained indefinitely, it will allow the Alaska SeaLife Center to grow a base of support for future endeavors to better understand and maintain the integrity of the marine ecosystem of Alaska.

4. Strategic Plan: Process and Financial Resources

The Alaska SeaLife Center strategic plan for 2006-2010 represents the first planning effort launched from a base of operational and financial stability that made it possible to look forward. After opening in 1998, it took several years for the Alaska SeaLife Center to recover from major challenges including debt service, an initial business model that relied on unrealistic assumptions, construction problems, and changes in executive leadership. Attempts at strategic planning in prior years were derailed by a focus on survival rather than strategy. Now that executive management has been stable for the last 5 years, the overall goal is to finish stabilization, determine strategic and tactical objectives necessary to move forward, and work for sustainability.

The strategic plan was developed in 2004 and early 2005 by the Leadership Team, which is comprised of department directors from Education, Research, Veterinary Services, Husbandry/Facilities, Visitor Services, Development, Finance/Administration, and the Executive Director. Each director worked with his or her staff members to determine strategic and tactical objectives, and the Board of Directors first approved the plan in April 2005. A list of the Board of Directors is attached, and board positions include designees from the City of Seward and

University of Alaska to ensure community support and scientific oversight. However, rather than having the Board determine priorities, this strategic plan was driven by those in charge of operations before undergoing an extensive board approval process.

Over the past five years, the Alaska SeaLife Center has used federal grants and appropriations to reach its current level of operational stability and dramatically increase capacity for marine research, wildlife rehabilitation, exhibit development, and educational programming. The Leadership Team and Board of Directors recognize the importance of moving toward more sustainable avenues for funding as federal budget priorities change. Sea Train will help the Alaska SeaLife Center build capacity for development efforts to identify and attract those alternative funding sources. Creating a culture of philanthropy among state residents has emerged as a critical, overarching goal for all Alaska non-profits, many of whom have relied on federal appropriations to become established and financially stable.

The Alaska SeaLife Center has been an important economic engine for the City of Seward, and both organizations currently are working with the Portico Group on long range master plans. Particular emphasis has been placed on development of a community waterfront area adjacent to the Alaska SeaLife Center, and city administrators also want to find new ways to attract more visitors from Anchorage. The master plan is a subset of the strategic plan in that it recognizes that fiscal goals must be reached in order to look toward the future, and planning must be grounded in operational realities.

5. Appropriateness of Project for Institution, Audience

Seward has a year round population of approximately 5,000 residents within 20 miles of city limits. The 2000 census listed the Anchorage population as 260,283 or 41.5 percent of Alaska's total (626,932). Close to 700 individuals, couples and families are currently Alaska SeaLife Center members, with 179 of those member households in Seward and 278 in Anchorage. In 2000, there were approximately 95,000 occupied housing units in Anchorage, representing a great opportunity for increasing support for the Alaska SeaLife Center from that population. The institutional strategic plan focuses several objectives on finding ways to connect families and businesses throughout the state with the Alaska SeaLife Center mission and activities.

The direct audience for Sea Train programs includes fifth grade children, parent chaperones, and teachers from the Anchorage School District. Rather than developing programs or exhibits and hoping that students and other visitors will become engaged, the Sea Train partnership ensures that the target audience is brought into the Alaska SeaLife Center. The program will serve that audience by providing a unique and memorable educational journey that meets curriculum goals. It will also broaden the perspectives of participants who would not otherwise get the opportunity to travel beyond Anchorage. Teachers and principals will become familiar with the programs and experiences that the Alaska SeaLife Center can offer, which should increase bookings for outreach and distance learning programs along with visits to the Center by students from other grade levels.

Since opening to the public in May 1998, the Alaska SeaLife Center has attempted to engage the Anchorage population through outreach programs, new exhibits, marketing and special events.

The majority of student groups visiting the Center in past years have come from more affluent areas where parents and teachers raise funds for field trips. The distance from Anchorage and cost of lodging in Seward can make it difficult for families with children to visit, especially during summer months when approximately 300,000 tourists arrive by cruise ship, railroad, and highway. Therefore, the Sea Train was designed to include every fifth grader in the Anchorage School District, a demographic that includes children and parents from 62 different elementary schools, with approximately 35 percent of those students qualifying for federally subsidized lunch programs. Future success in development efforts depends on building connections between individual and corporate donors, and the Sea Train provides a direct, positive experience for thousands of Anchorage residents.

In effect, the Alaska SeaLife Center is leveraging the Sea Train program to increase the effectiveness of all its mission elements. The program is intended to capture a much larger audience than the participants. If each participant speaks with friends and family members about the program and mentions a positive experience at the Alaska SeaLife Center and aboard the railroad, it will help build awareness and support for the facility. Many businesses that contribute to the Sea Train will have a connection with the Alaska SeaLife Center and its mission that did not previously exist. The Alaska SeaLife Center and Alaska Railroad Corporation can capitalize on access to summer tourists, most of whom are affluent and interested in lifelong education, to promote the program and encourage donations. Brochures, displays, and programs developed by Alaska SeaLife Center will publicize Sea Train, and travelers can be given the option to donate through minimal additions to ticket prices. In addition, the Center has a professional public relations function to encourage visits by the media and build awareness and support for the Sea Train and its mission-enhancing educational results.

6. Project Resources: Time and Budget

Sea Train programs will occur in the month of October for very deliberate reasons that correspond with priorities and schedules of all three partners. For the Anchorage School District, it allows time for teachers to get well acquainted with their students, undergo training for Sea Train, and complete pre-visit activities in their classrooms. The Alaska Railroad Corporation stops running passenger trains by mid-September but has operational capacity to offer Sea Train charters before trains undergo off-season maintenance, and there is little or no danger of avalanches in mountain passes before December. Alaska SeaLife Center attendance is traditionally low in October since the tourism season has ended and most school groups visit in the spring, so educators traditionally use fall and winter months to develop new programs and focus on outreach and distance education.

The past successes of the pilot program and full implementation this October clearly show that the partners can effectively complete this large-scale project. Transportation costs for school buses and Sea Train charters comprise the largest budget categories, even with a discount of nearly 50 percent from the railroad's rate for non-profit charters. However, the amount of donated staff time for program planning and delivery, travel expenses, teacher training, and supplies from all three partners gives strong evidence that the program is considered appropriate and worthwhile. Now that individuals and businesses in the Anchorage community have

witnessed the program in action, there will be increased momentum for soliciting additional in-kind contributions for food and sponsorship for other expenses.

The Anchorage School District School Board's approval of the Sea Train as part of the fifth grade curriculum is one of the program's strongest components, but it also presents a major challenge: schools cannot ask parents to pay for activities that are part of the curriculum. The Alaska SeaLife Center has taken the lead in fundraising as a 501(c)(3) non-profit that has access to a variety of funding sources, and because the program has the potential to build capacity in a unique and effective way. Funding will allow each of the partners to develop and evaluate pathways for sustainability, for example:

- Principals and teachers from schools with active PTAs and business partners can request those organizations to sponsor students' participation, especially those involved with the Anchorage School District's School-Business Partnership Program
- A second full year of Sea Train programs will result in a total of 7,000 students and nearly 1,400 parent chaperones who are "alumni" of the program and can help promote the value of the program and the Alaska SeaLife Center by word of mouth

A highly visible program like Sea Train appeals to corporate sponsors and contributors, and the ties to energy curriculum and emphasis on science have attracted donations from energy producers like ConocoPhillips. However, Anchorage has far fewer large corporations than most cities in the lower 48 states and those organizations receive hundreds of requests from non-profits each year, so support from individual donors and foundations will be critical to long term success.

7. Project Resources: Personnel and Technology

The Alaska SeaLife Center Education Director Dana Sitzler, who serves as Project Director for the Sea Train program, has lead development of the program from its inception. She worked with Anchorage School District administrators to integrate the Sea Train program into fifth grade curriculum, and coordinated development of supplemental materials and programs by Alaska SeaLife Center education staff. Program Manager Chris Wettstein coordinates delivery of Sea Train programs at the Center. Outreach Educator Ron Goertz, who is based at the Alaska SeaLife Center's satellite office in Anchorage will take the lead in planning Sea Train logistics and will deliver programs aboard all trains. Additional educators will deliver programs on the train, provide information at the Center and adapt and develop new program materials. The ASLC education staff has experience developing and delivering both formal and informal education programs. All Alaska SeaLife Center educators must have at least a four-year college degree and three years of teaching experience. Costs for education staff time to plan and deliver the Sea Train program are included in the grant budget.

However, it takes an additional 475 hours of staff time to fully implement the program. Factors such as the seasonality of visitor attendance, marine research field work and the release of most rehabilitated marine mammals by September afford many Alaska SeaLife Center staff members the flexibility to contribute time during Sea Train. This October, 54 staff members from virtually every department—including the executive director, researchers, and veterinarians—took time from regular job duties to staff Sea Train activity stations at the Center. The program

Seward Association for the Advancement of Marine Science, dba the Alaska SeaLife Center

provided an unexpected benefit of uniting diverse employees in a common cause, reinforcing the idea that building public support for the Alaska SeaLife Center requires a team effort.

For the Anchorage School District, program oversight and development is provided by Enid Silverstein, the Executive Director of Curriculum and Instruction and Patricia McRae, the Executive Director of Elementary Education. Both work directly under the Superintendent of Schools, Carol Comeau. [A support letter from Ms. Comeau is attached.]

The Alaska Railroad Corporation has many employees who organize charters as part of their job duties, and the Sea Train simply presents a more challenging series of events to coordinate. Sarah Streiffert, Manager, Education Partnerships, plays the greatest role in Sea Train planning and delivery.

Two outside contractors will assist with the grant project:

1. an Anchorage-based individual or firm that can assist with logistics and act as a liaison between the three partner organizations, which proved essential in 2006;
2. an evaluator from the Institute of Social and Economic Research at the University of Alaska Anchorage, who will assess the program to see how effective it is in reaching the Alaska SeaLife Center's stated goals.

Qualifications of the contractor and resumes for Institute of Social and Economic Research investigators are included in the text response attachments describing key personnel.

BUDGET FORM: Section B, Summary Budget

	\$ IMLS	\$ Cost Share	\$ TOTAL COSTS
1. Salaries and Wages	\$22,846.00	\$4,000.00	\$26,846.00
2. Fringe Benefits	\$5,712.00	\$1,000.00	\$6,712.00
3. Consultant Fees	\$0.00	\$0.00	\$0.00
4. Travel	\$9,200.00	\$0.00	\$9,200.00
5. Supplies and Materials	\$10,200.00	\$48,100.00	\$58,300.00
6. Services	\$70,000.00	\$65,000.00	\$135,000.00
7. Student Support	\$0.00	\$0.00	\$0.00
8. Other Costs	\$0.00	\$0.00	\$0.00
TOTAL DIRECT COSTS (1-8)	\$117,958.00	\$118,100.00	\$236,058.00
9. Indirect Costs	\$31,942.00	\$31,981.00	\$63,923.00
TOTAL COSTS (Direct and Indirect)	\$149,900.00	\$150,081.00	\$299,981.00

Project Funding for the Entire Grant Period

1. Grant Funds Requested from IMLS	\$149,900.00
2. Cost Sharing:	
a. Applicant's Contribution	\$36,981.00
b. Kind Contribution	\$113,100.00
c. Other Federal Agencies*	\$0.00
d. TOTAL COST SHARING	\$150,081.00
3. TOTAL PROJECT FUNDING (1+2d)	\$299,981.00
Percentage of total project costs requested from IMLS	50 %

*If funding has been requested from another federal agency, indicate the agency's name:

Schedule of Completion

- August 2007-
 - Solicit individual, foundation and corporate donations by making presentations and writing proposals
 - Work with principals, PTAs and School-Business partners to garner support
- July 2008
- August 2007
 - Get activity books, teachers' guides, and chaperone guides printed with corrections and revisions based on feedback from 2006 participants and curriculum updates
 - Plan teacher training
- August-
 - Obtain curriculum materials
 - Confirm donations of food and supplies from corporate sponsors
 - Meet with district administrators, ARRC staff and logistics coordinators to set tentative dates for 2007 trains, look at projected numbers of students at each school
- September 2007
- September 2007
 - Conduct teacher training
 - Confirm schedule for each elementary school's train days
 - Arrange bus transportation
 - Work with ASD Student Nutrition Services and other food suppliers to plan meals
- September-
 - Purchase snacks/beverages, count proper amounts for each school and put in storage
 - Prepare media releases and invite funders and media to ride along on selected train programs to promote the program and recognize sponsors
- October 2007
- October 2007
 - Program delivery all month
 - Begin evaluation of the program with participants and focus groups
- November 2007
 - Debrief and make recommendations for changes to program logistics
- December 2007-April 2008
 - Develop promotional materials and displays for the Alaska Railroad and the ASLC to promote Sea Train and encourage donations by summer visitors
 - Continue gathering evaluation data, including measuring numbers of new ASLC members and donors from Anchorage, surveying them to determine source of interest
 - Track booking of outreach, distance learning, and summer programs in Anchorage
- January-June 2008
 - Continue planning for Sea Train 2008 by making mid-term corrections to program management
- March-May 2008
 - Revise curriculum and program management and logistics, if necessary
- June-July 2008
 - Deliver visitor programs at the ASLC and on board ARRC trains to spark interest in Sea Train and raise funds
 - Complete evaluation report